数理生物学演習

第6回 ランダムな現象:

遺伝的浮動,ライト-フィッシャーモデル

野下浩司(Noshita, Koji)

☑ noshita@morphometrics.jp

分 https://koji.noshita.net

理学研究院 数理生物学研究室

突然変異固定までの平均待ち時間

再現したい図

(ただし課題では集団サイズが異なる)

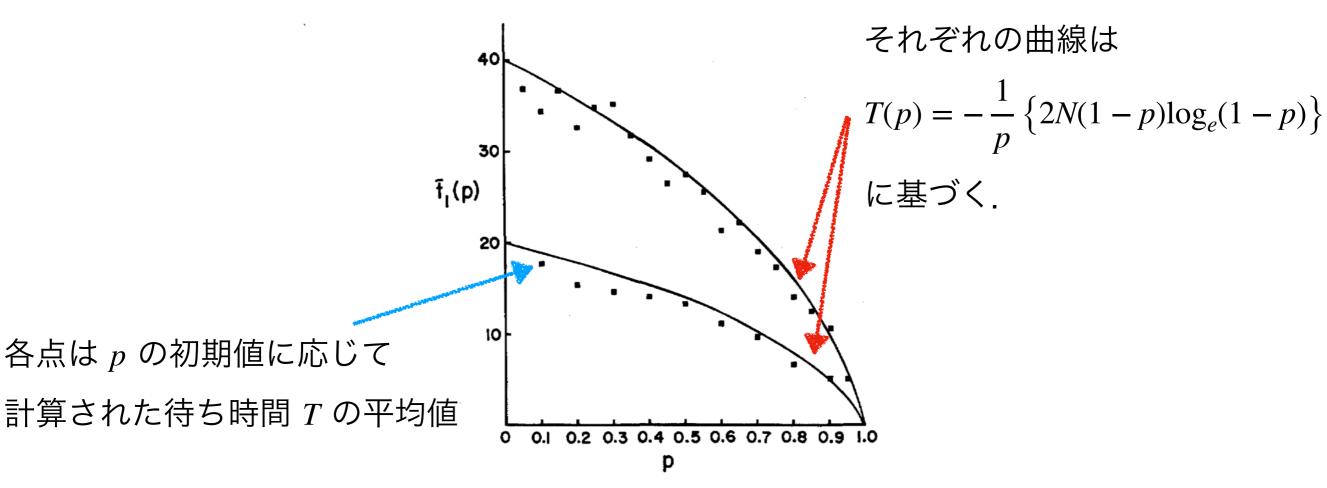


Figure 1.—Average number of generations until fixation of a selectively neutral mutant gene as a function of its initial frequency. The theoretical values are represented by curves and those of Monte Carlo simulation by dots. $2N_e$ =20 in the upper curve and $2N_e$ =10 in the lower one.

Kimura & Ohta, 1969, Genetics

• Kimura, M., Ohta, T. (1969). The Average Number of Generations until Fixation of a Mutant Gene in a Finite Population. *Genetics* **61**(3), 763-71. https://www.ncbi.nlm.nih.gov/pubmed/17248440